

# ABSTRACT

A system for controlling a plurality of load devices includes a high-side system operative to source current relative to at least two associated outputs. A low-side system is operative to sink current relative to a plurality of associated inputs. A control system controls the high-side system and the low-side system according to a multiplexing scheme that is operative to provide current to selected load devices of the plurality of load devices connected between the associated outputs and the associated inputs. The system can be implemented as an integrated circuit for driving the plurality of loads, which can include LED's.